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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/624,646  | 07/23/2003  | Hideki Kanie         | A-9906              | 6902             |
| 181   | 7590        | 05/19/2005           | EXAMINER            |                  |
| MILES & STOCKBRIDGE PC<br>1751 PINNACLE DRIVE<br>SUITE 500<br>MCLEAN, VA 22102-3833 |             |                      | SAETHER, FLEMMING   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3677                |                  |

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/624,646

Applicant(s)

KANIE, HIDEKI

Examiner

Flemming Saether

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshida (US 4,828,444). Oshida discloses a mounting device (10) in combination with a threaded stud (31) comprising a main body (11) having a bore (12) with a plurality of pawls (16) oriented in a perpendicular direction prior to mounting (see Fig. 4) and including a thin flexible section (16a) leading to a thick section having a pair of arcuate grooves (18) and an arcuate end (see Fig. 2) so as to engaging section for engagement with the threaded stud. It should be recognized that the difference between the stud diameter and inner wall thickness is essentially zero (see Fig. 6(b)) thus the length of the pawls thick section would be greater and forms an angle less than 90° once mounted (see Fig. 6(a)). The insertion from opposite ends is an intended use or which the device of Oshida would be capable.

***Claim Rejections - 35 USC § 103***

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Battie (US 6,070,836) in view of Courtin (US 6,155,762). Battie discloses a mounting device having a main body (8) with a bore (3) for receiving a stud and a component mounting section (1, 2). As seen in Fig. 3, the bore includes a plurality of pawls (15, 16) each

having a thin section (15) forming a hinge and connected to an inner wall of the bore and a thick section (16) located at an opposite end of the thin section. Prior to insertion of the stud the pawls extend substantially perpendicular to an axis of the bore (Fig. 3) and with the insertion of the stud, the pawls for an angle of substantially less than 90 degrees (Fig. 6). Furthermore, the pawls facilitate insertion of the stud from either end of the bore. Battie does not disclose the thick portion of the pawls to be provided with an engaging section and a groove. Courtin discloses a device comprising a bore (not labeled) for receiving a stud (22) including a pawl (6) having a thin pivot section (11) leading to the thick section (12). As seen in Figs. 3 and 5, the thick section has an engaging section (16) for being received between thread crests and a groove (15) for receiving the thread crests. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the thick section of the pawls of Battie with an engaging section and a groove as disclosed in Courtin in order to better engage the stud and, the better the stud engagement, the less likely is the mounting device to be dislodged from the stud. The skilled artisan would have recognized to provide both sides of the thick section with the engagement section and groove in order to continue to facilitate operation from both ends.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Battie in view of Courtin as applied to claim 6 above, and further in view of Kraus (US 4,999,019). Kraus teaches to form the engagement section and groove of a plurality of pawls (3) in an arcuate shape (see Fig. 2). At the time the invention was made, it would

have been obvious for one of ordinary skill in the art to make the engagement section and groove of the pawls disclosed in modified Battie in an arcuate shape as disclosed in Kraus to further improve the engagement of the mounting device to the stud and further lessen the likelihood of the mounting device becoming dislodged from the stud.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Battie in view of Courtin and Kraus as applied to claims 6 and 7 above, and further in view of Miura (US 5,816,762). Miura teaches to form the pawls (21A) as staggered along the inner wall of the bore. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to make the pawls disclosed in modified Battie staggered as disclosed in Miura to still further improve the engagement of the mounting device to the stud and again still further lessen the likelihood of the mounting device becoming dislodged from the stud.

### ***Response to Remarks***

The examiner agrees with applicant the claimed combination with the stud defines claims 1-3 over Battie. However, the newly found reference to Oshida has been applied as set forth above. The examiner acknowledges that Oshida does not disclose the stud inserted from either direction and the examiner has a suggestion as to an additional structural limitation to bring out this distinction which is set forth below.

Applicant argues that there would be no motivation for combining the grooves of Courtin to the Pawls of Battie since in Battie the pawls are for wedging and would provide no benefit from the engaging section and groove provided by Courtin. In response the examiner agrees with applicant's understanding of Battie but, disagrees with pawls would not receive any benefit from contoured engagement section and groove as disclosed in Courtin. Indeed, the un-contoured block as applicant characterizes the pawls in Battie are certainly adequate for wedging but, the ultimate goal is for retention onto the stud therefore any addition advantage provided by a thread engagement would be welcome and an engagement section and groove as disclosed Courtin provides retention to the stud. It should also be recognized that the addition of the engagement and groove to the pawl of Battie would not preclude it from performing its wedging function only further enhance it's the retention to the stud.

#### ***Allowable Subject Matter***

In regards to claims 1-3, the reference to Oshida provides the grooves on only one side of the pawl since the intent is not for it to be mountable onto the stud in two directions. With this in mind, the examiner suggests that engaging sections and grooves simply be claimed as being located on opposite sides of the pawls.

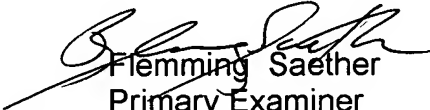
#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Flemming Saether  
Primary Examiner  
Art Unit 3677